

ABSTRACT

A semiconductor laser manufactured by selective MOVPE growth, in which the lattice relaxation of recombination layers grown on large width portions is suppressed, the leak current is suppressed, and the reliability is high. When a semiconductor layer is manufactured by selective MOVPE growth, a DH mesa stripe (6) is epitaxially grown on a small width portion (14) which is a spacing of a silicon oxide mask (13). The average strain of the DH mesa stripe (6) is shifted to the compression strain side to an extent that lattice relaxation is not caused. As a result, the tensile strains of recombination layers (16) grown on large width portions (15) are mitigated.